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Claims:

1. A method for pointing the beams (63-67) of an electromagnetic wind profiler comprising a stationary antenna matrix (61) with several individual antenna elements (62) in
5 which method

- an input signal is fed to the antenna matrix (61),
- the phase of the input signal is adjusted for the individual antenna elements (62) in order to point the beam (63-67) of the profiler, and
- separate feeder lines for each beam direction are used for feeding the signals
10 to the antenna elements (62),

characterized in that

- the phase differences between the individual antenna elements (62) are controlled with hybrid coupler elements.
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2. A method in accordance with claim 1, characterized in that 90°-hybrid coupler elements are used to create four beams tilted in different directions.

3. A method in accordance with claim 1, characterized in that an additional row of 180°-
20 hybrid coupler elements are used to create the vertical beam.

4. An apparatus for pointing the beams (63-67) of an electromagnetic wind profiler comprising a stationary antenna matrix (61) with several individual antenna elements (62) which apparatus comprises
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- means for feeding a signal to the antenna elements (62),
- means for adjusting the phase differences between the individual antenna elements (62), and
- separate feeding means are used for feeding the signals to the antenna elements (62),

30 characterized in that

- the phase controlling means are hybrid coupler elements (3,4).

5. An apparatus in accordance with claim 4, characterized in that 90°-hybrid coupler elements are used to create four beams tilted in different directions.
- 5 6. An apparatus in accordance with claim 4, characterized in that an additional row of 180°-hybrid coupler elements are used to create the vertical beam.